

The times of the day during which the counts were made were as follows:—Sections A to D, 1500 to 1800 hours; sections E to G, 1100 to 1530 hours.

—BRIAN GLOVER, Mitcham, South Australia.

Paper Nest Wasp at Bickley.—Since the discovery of the Paper Nest Wasp (*Polistes variabilis*) in the metropolitan area about a year ago (*W.A. Naturalist*, vol. 2, 1951, p. 169) the spread of the insect has come under extensive comment. It was with surprise, nevertheless, that I found a nest attached to a lemon tree in my orchard at Bickley on February 23 this year (1951).

This was quite small, barely two inches in diameter, but some of the grubs were already full grown. Here and there in the centre of the nest one could be seen spinning a cover to its cell, while some cells were already closed with a cap of silk. Numbers of the outer cells still under consideration were each seen to contain a grub, these obviously being built out as need arose to accommodate the growing inmate, an arrangement that assured capacity stocking of the nest while building proceeded. Incidentally, feeding of the small grubs is facilitated while they are housed in these unfinished cells.

Presence of the wasps led to the discovery that patches of outer bark up to half an inch in diameter had been removed from the branches of a number of lemon trees. Some of these scars were comparatively old, others fresh. The wasps have not been seen taking this bark, but as removal of it continues as the nest is enlarged, it seems likely that this is where they are obtaining the raw material for building.

At the time of discovery only nine or ten wasps were seen about the nest during the day, but 14 were counted on it by the aid of a torch at night. At the present time (early April) emerging insects have swelled the total to fully 30. None of these appear to be less than three-quarters of an inch in length.

In passing, some of their more conspicuous habits are interesting. It has been noticed, for instance, that incoming wasps with jaws crammed with building material not infrequently pass over a portion of their load to one or more insects already at the nest, and sometimes an insect on receiving a portion will divide it with another, an excellent arrangement by which the time and labour of transporting raw material is cut down to a minimum. Similarly, food for the grubs, which often consists of a viscous, greenish coloured ball, may also be divided on arrival at the nest.

On March 16 Mr. George Parton discovered a deserted nest attached to a lemon tree, where some of the old bark scars had been noticed, this being something over 100 feet from the one now in use. It was of interest that in this tiny structure, less than an inch in diameter, 14 cells had been occupied, suggesting that the small band had migrated from there to establish the present nest.

—W. H. LOARING, Bickley.